

REMARKS

The Applicants do not believe that examination of the response contained herein will result in the introduction of new matter into the present application for invention. Therefore, the Applicants, respectfully, request that this response be entered and that the claims to the present application, kindly, be reconsidered.

The Final Office Action dated July 25, 2005 has been received and considered by the Applicants. Claims 1-21 are pending in the present application for invention. Claims 1-21 are rejected by the July 25, 2005, 2004 Final Office Action.

The Final Office Action rejects Claims 1, 2 6-9, 12, 13 and 17-21 under the provisions of 35 U.S.C. §103(a) as being obvious anticipated over U.S. patent No. 5,798,858 issued to Bodeep et al. (herein after referred to as Bodeep et al.) in view of United States Publication No. US 2003/0152386 A1 in the name of Vohra et al. (hereinafter referred to as Vohra et al.).

Regarding rejected Claims 1, 2, 6-9, 12, 13 and 17-21, the Examiner states that Vohra et al. teach up-converting received signals to a unique frequency band. The Applicants, respectfully, point out that Vohra et al. teach up-converting information onto RF sub-carriers and multiplexing RF signals on different sub-carriers followed by optical modulator 170 that up-converts the multiplexed RF signals onto an optical carrier as a sub-carrier multiplexed, multi-format optical signal (see paragraph 36). The intended purpose of Vohra et al. is clearly to up-convert RF signals, multiplex the up-converted RF signals and place an optically converted version of the multiplexed RF signal onto an optical carrier a multiplexed, multi-format optical signal. It would be contrary to the intended purpose of Vohra et al. to not multiplex the RF signal prior conversion to optical signals.

The rejected claims define subject matter for a plurality of optical signal transmitters for receiving and up-converting received signals to a unique frequency band and transmitting optical signals representative of received signals along a plurality of optical transmission lines and combining the transmitted optical signals to form a single optical transmission line. There is no disclosure or suggestion within Vohra et al. for optically transmitting up-converted signals without first multiplexing. Vohra et al. teach receiving RF signals from various heterogeneous sources and multiplexing these signals

in order to convert a multiplexed signal prior optically transmitting the multiplexed. The intended purpose of Vohra et al. is to multiplex the RF signals before converting the multiplexed signal to an optical signal.

As stated by the Examiner, Bodeep et al. do not teach up-converting received signals to a unique frequency band. The Applicants, respectfully, point out that Bodeep et al. teach employing dithering tones to signals to identify the channels that the signals are contained on (see col. 2, lines 15-25) rather than un-converting signals to unique frequencies. There is no disclosure or suggestion for converting frequencies to identify the channels that the signals are contained on within Bodeep et al. instead Bodeep et al. teach to place dithering tones on the signals to identify the signal channels.

The rejected claims define subject matter for up-converting said signal inputs into a plurality of non-overlapping frequency bands and transmitting a plurality of optical signals on a plurality of optical transmission lines. As previously discussed, Vohra et al. do not disclose or suggest optically transmitting up-converted signals without first multiplexing the signal, and it would be contrary the intended purpose of Vohra et al. to optically transmit up-converted signals before multiplexing the signal. There is no disclosure or suggestion for converting the frequencies to the channels that signals are contained on within Bodeep et al. Therefore, there remain features defined by the rejected claims that are not found in the rejection. Therefore, this rejection is traversed.

The Final Office Action rejects Claims 3-5, 11, and 14-16 under the provisions of 35 U.S.C. §103(a) as being obvious anticipated over Bodeep et al. in view of Vohra et al. and further in view United States Publication No. US 2002/0021464 A1 in the name of Way (hereinafter referred to as Way).

The Applicants, respectfully, point out that Way teaches the embedding of distinct wavelength lambdas using a WDM Multiplexer. The rejected claims define subject matter wherein no signal multiplexer is used to combine said optical transmission lines combined into said single optical transmission line. As previously discussed, the intended purpose of Vohra et al. is to multiplex RF signal before converting the multiplexed signal to an optical signal. The Final Office Action here combines two references that perform the function of forming a multiplexed optical signal. Way forms a multiplexed optical signal using a WDM Multiplexer to embed distinct wavelength lambdas. Vohra et al. multiplexes RF signals before converting the

multiplexed version of the RF signals into an optical signal. Neither discloses or suggests that transmitting of up-converted optical signals on a plurality of optical transmission lines before combining the signals.

Bodeep et al. teach employing dithering tones to signals to identify the channels containing the signals (see col. 2, lines 15-25) and specifically teaches away from optically transmitting different frequencies (see col. 1, lines 37-41). Accordingly, a person skilled in the art would not seek to combine Bodeep et al. with either of Way or Vohra et al. There would be no point in such a combination. Way or Vohra et al. teach two different techniques for multiplexing, while Bodeep et al. teach not to multiplex but instead to insert dithering tones to identify the separate channels. None of the cited references teach up-converting signals to unique frequencies and transmitting separate un-converted optical signal prior combining. There is no disclosure or suggestion for converting frequencies to identify the channels that the signals are contained on within Bodeep et al., instead Bodeep et al. teach to place dithering tones within the signals to identify signal channels.

Therefore, this rejection is traversed.

The Final Office Action rejects Claims 3-5, 11, and 14-16 under the provisions of 35 U.S.C. §103(a) as being obvious anticipated over Bodeep et al. in view of Vohra et al. and further in view United States Publication No. U.S. Patent No 6,317,234 in the name of Quale (hereinafter referred to as Quale).

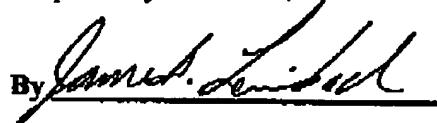
As previously discussed, the intended purpose of Vohra et al. is to multiplex RF signal before converting the multiplexed signal to an optical signal. The Final Office Action here combines a reference that forms a multiplexed optical signal with Bodeep et al. that specifically teach away from optically transmitting different frequencies (see col. 1, lines 37-41) in a multiplexed manner. Accordingly, a person skilled in the art would not seek to combine Bodeep et al. with Vohra et al. Furthermore, Vohra et al. do not teach plural transmitting of un-converted optical signals as defined by the rejected claims.

Quale does not provide any teaching towards plural transmitting of up-converted optical signals as defined by the rejected Claim 10. Moreover, Quale does not provide any disclosure or suggestion for combining a plurality up-converted optical signals as defined by the rejected Claim 10. Therefore, this rejection is traversed.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

Respectfully submitted,

By 

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